## A New Subspecies of *Pseudochazara graeca* (Staudinger) 1870 (Lep.: Satyridae) from Greece

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Pseudochazara graeca (Staudinger) has recently been separated from the Asiatic species Pseudochazara mamurra (Herrich-Schaeffer) and has been placed as a species in its own right (Brown, 1976). The distribution of P. graeca seems to be entirely restricted to Greece, it being recorded from Mt. Taygetos, Mt. Chelmos, Mt. Parnassos, Mt. Tymphristos and Mt. Peristeri (Brown, loc. cit.), Mt. Menalon (Willemse, 1975), Mt. Iti (Lempke, 1974) and Ioannina (Koutsaftikis, 1974). The specimens from Mt. Taygetos up to as far north as Mt. Tymphristos are known to correspond to the description of P.g. graeca (Staudinger, 1870). However, examples of this same species occur in the Pindos mountains and correspond to an as yet undescribed subspecies.

Pseudochazara graeca coutsisi ssp. nov.

Male: Upperside ground colour very dark brown, the pale buff postdiscal markings obscured by extensive fuscous suffusion. Underside ground colour yellow-buff; hindwing heavily irrorated with dark grey, the distal border of discal area darkened to form a prominent character in most specimens. Forewing length 20.5-26 mm. Otherwise similar to *P.g. graeca*.

Female: Similar to male but larger, forewing length 26-27 mm. Upperside pale postdiscal markings less obscured by

fuscous suffusion.

Material examined:

Holotype & (forewing length 24 mm.). Smolikas Massif, N. Greece, 1,600 m., 27.vii.1976. J. Brown leg. et coll.

Allotype  $\circ$  (forewing length 27 mm.). Katara Pass, Pindos Mts., 1,600 m., 17.viii.1976. J. G. Coutsis leg. In coll. Higgins.

Paratypes. Two & &, data as for holotype but 25.vii.1975 and 17.vii.1976, in coll. Brown. Seven & &, three 9, data as for allotype but 1,450-1,600 m. and 25.vii.1970-27.viii.1976, J. G. Coutsis leg. et coll. Five & &, data as for allotype, J. G. Coutsis leg. In coll. Higgins.

This subspecies is named with pleasure after Mr. J. G. Coutsis who was the first to capture this remarkable insect.

*P.g. coutsisi* flies over rough clearings in coniferous forests at altitudes of 1,400 m. to 1,650 m. This is rather different from the habitat of *P.g. graeca*, which favours open scree slopes.

P. graeca coutsisi can be distinguished from P. graeca graeca by the former's often smaller size, more darkly suffused upperside and, on the hindwing, the heavily marked underside. The underside of P.g. graeca is less distinctly irrorated and appears less grey and more ashen and pale. However, no significant difference could be discerned between the male genitalia of these two subspecies of P. graeca. Similarly, P.g. coutsisi can be clearly distinguished from P. mamurra, which

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species it resembles superficially, by its male genitalia, which show a broad distal third of the valve and a pointed vaivular tip, there being no trace of the more tapered valve which is typical of P. mamurra. P.g. coutsisi also shows some resemblance to the taxon obscura Staudinger, which flies in the Taurus Mountains, in that both have a very darkened and similar upperside. However, the male genitalia and androconia of specimens of obscura make it certain that this taxon is more closely allied to P. mamurra than to P. graeca. For example, the androconia of obscura, like those of mamurra, but unlike those of graeca, are of subgroup 2b (Brown, 1976). Moreover, obscura can be clearly distinguished from coutsisi by its rather deeply scalloped hindwings and by its silvery-grey hindwing underside. It is hoped to consider the relationships of the different forms of *Pseudochazara* from S.E. Europe and Asia Minor in a later work.

Thus, there would seem to be at least two different subspecies of P. graeca, which still seems to be restricted in its distribution to Greece. In the Pindos range of N. Greece there occurs the darker and the smaller P.g. coutsisi, while P.g. graeca seems to occupy most of the highest mountains of central Greece and the Peloponnesos. It remains unclear as to where the boundary between these two subspecies exists and its nature is entirely unknown.

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## References

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A SECOND BROOD OF INACHIS 10 (L.)? — On several occasions here during mid-October 1976, I saw large numbers of Vanessa atalanta L. and a dozen or so I. io (L.) feeding on ivy flowers. I had never before seen atalanta in such numbers, and some were still flying about on sunny days in the second week of November. The October io were mainly in fresh condition and I think may have been second brood specimens, as the summer brood disappeared from my garden buddleia during late August and there were hardly any in September. With plenty of ivy in bloom for nourishment this autumn, one hopes that these October io butterflies may hibernate successfully. — RICHARD REVELS, Top Field Farm, Dunton Lane, Biggleswade, Beds., SG18 8QU.